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14. FLOCKING AND COURTSHIP DISPLAY IN REDWATTLED LAPWING (*VANELLUS INDICUS*)

The redwattled lapwing *Vanellus indicus* is one of the most common bird species found in and around Kota (25° 10' N, 75° 52' E), in Rajasthan. There are always a couple of lapwings permanently present near open drains, sewage nullahs, shallow pools & margins of tank. When the water dries up, they are quite capable of living on dry sunbaked land; they even nest and breed in April-May, when the temperature ranges between 38°C to 45°C in this part of India. Ali and Ripley (1987) write in their 'COMPACT HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN' that redwattled lapwings do not form large flocks (6-12 birds only), there is no mention of any courtship display. This note is to report a different behaviour pattern, which I have observed.

Large congregations of redwattled lapwings ranging from 26 to over 200 individuals, were seen flocking on large open drains, nullahs, pools and tanks. In this paper the term *flocking*, does not include loose congregations of birds which remain scattered on wetlands, but is strictly limited to the gathering of birds, where they stand closely packed apparently doing nothing. Incidentally, redwattled lapwings breed in Kota mainly from April to September, and a good number of eggs and chicks can be seen during this period. Just before commencement of breeding in April, I have seen large flocks near waterbodies. The number of individuals in a flock varied from

37 to 62 during February-March. These flocks are usually seen on the margins of waterbodies early in the morning, the birds then disperse to feed nearby, but flock together once the feeding is over.

Courtship display is not a very elaborate affair in redwattled lapwings but still it is attractive. The male bird presents itself in the best possible manner to the probable mate. The male bird flies off, circles the area a few times giving a different call, and returns a little later near a prospective female. After alighting a few feet away, the male raises its head, fluffs its breast feathers, so the white abdominal and contrasting black front are presented to the female. Only the little black head, red wattles and bill are seen over the puffed up breast. The bird looks upright and proud. In shuffling steps, the male approaches the female and circles around it a few times. If the female is responsive it lowers its head to about 45° from the ground and lets the male come close, otherwise the female flies off or moves away, putting an end to the advances of the eager male. The male bird tends to repeat this with different females, also many males (3-4) may be displaying close to each other with females in audience. Once the pair formation has taken place birds become highly aggressive and noisy. They become territorial and actively defend their territories against all creatures including grazing cattle, other birds, snakes, dogs and man. The redwattled lapwings while defending their

territory rise towards the sky noisily and suddenly swoop down or circle over the intruder in their territory. Both male and female birds take part in this act; mostly it becomes contagious and other nesting pairs also get involved in rais-

ing a racket to scare away any possible predator.

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15. PLAY FEEDING BY THE GULLBILLED TERN *GELOCHELIDON NILOTICA* (GMELIN)

The fishing technique of terns is a simple process involving only capturing and engulfing. Before engulfing, the fish is arranged in head-foremost position (Ali and Ripley, 1981). Interestingly, a gullbilled tern (*G. nilotica*) was observed feeding in a slightly different manner — a manner which can be called 'play-feeding', rather than the simple engulfing technique.

The tern was observed in flight with a captured fish on 31st December, 1995 at 0800 hrs in Dombivli, Thane dist. Maharashtra. As usual, the quarry was held vertically in head-foremost position. Instead of swallowing it, the bird dropped the fish and immediately caught it. Resuming its flight, it again released the fish and allowed it to descend for about one metre. After catching the prey in the air, the bird went a little higher and the play was repeated. But this time

the bird was unable to catch the fish in the first attempt. Somehow it managed to grab the fish after a fall of 2-3 m and finally engulfed the fish without any more play.

Significantly, the only group of birds that have been seen to play in a convincing manner are the crows, especially the ravens. These are with the highest intelligence of all avian species (Desmond Morris, 1990).

It is also likely that the kind of play mentioned above may not be an established trend, but just an opportunistic display by *G. nilotica*.

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16. BREEDING RECORD OF GREATEARED NIGHTJAR *(EUROSTOPODUS MACROTIS)* AT SIRUVANI HILLS, TAMIL NADU

The greateared nightjar *Eurostopodus macrotis* was recorded nesting in Tamil Nadu for the first time at the foothills of Siruvani during the first week of May 1995. C.V. was on routine nest search, as a part of project work on the breeding strategies of birds in a tropical moist deciduous forest at Siruvani, Coimbatore, Tamil Nadu. Suddenly a bird was flushed and flew into

a bush nearby. The surrounding places were checked and two eggs were seen on the bare ground but without any lining, surrounded by dry leaves. The eggs were pale yellow with a few black spots on them. After 15 min the bird came back to the nest and started incubating. A closer look helped in identifying the bird as the greateared nightjar. This nest was about 50 m